



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,498	11/14/2003	Lawrence K. Lam	070602-0122	1019

7590 10/14/2004

Mark J. Itri, Esq.  
McDermott, Will & Emery  
18191 Von Karman Avenue  
Suite 400  
Irvine, CA 92612

EXAMINER

MULL, FRED H

ART UNIT PAPER NUMBER

3662

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/714,498

Applicant(s)

LAM ET AL.

Examiner

Fred H. Mull

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 3-18-2004, 4-19-2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Schineller.

Schineller discloses the claimed invention including: a first phase shifter configured to receive or generate a first signal (110, Fig. 1); a second phase shifter configured to receive or generate a second signal (114); a first variable time delay

Art Unit: 3662

system coupled to the first phase shifter and configured to generate or receive a third signal (30); a second variable time delay system coupled to the second phase shifter and configured to generate or receive a fourth signal (40); a first signal processing system coupled to the first variable time delay system and the second variable time delay system and configured to generate or receive a fifth signal; a sampling system configured to sample at least the third signal and the fourth signal and generate at least a sixth signal and a seventh signal respectively; a switching system configured to receive the at least a sixth signal and a seventh signal and output an eighth signal and a ninth signal, the eighth signal being the same as one of the at least a sixth signal and a seventh signal, the ninth signal being the same as one of the at least a sixth signal and a seventh signal (20); a measuring system configured to receive the eighth signal and the ninth signal and process at least information associated with the eighth signal and the ninth signal (15; col. 3, line 44 to col. 3, line 3).

3. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Adam.

Adam discloses the claimed invention including: a first phase shifter configured to receive or generate a first signal (710, Fig. 7); a second phase shifter configured to receive or generate a second signal (5<sup>th</sup> phase shifter from top); a first variable time delay system coupled to the first phase shifter and configured to generate or receive a third signal (706); a second variable time delay system coupled to the second phase shifter and configured to generate or receive a fourth signal (708); a first signal processing system coupled to the first variable time delay system and the second

Art Unit: 3662

variable time delay system and configured to generate or receive a fifth signal; a sampling system configured to sample at least the third signal and the fourth signal and generate at least a sixth signal and a seventh signal respectively; a switching system configured to receive the at least a sixth signal and a seventh signal and output an eighth signal and a ninth signal, the eighth signal being the same as one of the at least a sixth signal and a seventh signal, the ninth signal being the same as one of the at least a sixth signal and a seventh signal; a measuring system configured to receive the eighth signal and the ninth signal and process at least information associated with the eighth signal and the ninth signal (700; col. 11, lines 32-41).

4. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Daniel.

Daniel discloses the claimed invention including: a first phase shifter configured to receive or generate a first signal (40, Fig. 0); a second phase shifter configured to receive or generate a second signal (2<sup>nd</sup> phase shifter from top); a first variable time delay system coupled to the first phase shifter and configured to generate or receive a third signal (5); a second variable time delay system coupled to the second phase shifter and configured to generate or receive a fourth signal (2<sup>nd</sup> time delay from top); a first signal processing system coupled to the first variable time delay system and the second variable time delay system and configured to generate or receive a fifth signal; a sampling system configured to sample at least the third signal and the fourth signal and generate at least a sixth signal and a seventh signal respectively; a switching system configured to receive the at least a sixth signal and a seventh signal and output an

Art Unit: 3662

eighth signal and a ninth signal, the eighth signal being the same as one of the at least a sixth signal and a seventh signal, the ninth signal being the same as one of the at least a sixth signal and a seventh signal; a measuring system configured to receive the eighth signal and the ninth signal and process at least information associated with the eighth signal and the ninth signal (13; col. 3, lines 12-31).

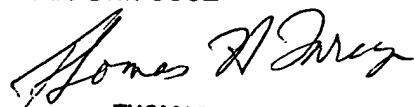
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred H. Mull whose telephone number is 703-305-1250. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H Tarcza can be reached on 703-360-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fhm

Fred H. Mull  
Examiner  
Art Unit 3662



THOMAS H. TARCZA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600